

AMENDMENTS TO THE CLAIMS

Claims 1-20. (Canceled)

21. (Currently Amended) A light detecting system comprising:

an imager device, comprising:

a substrate having a plurality of photosensitive regions; and

a substantially planar microlens array ~~providing for a substantially planar imager device, said substantially planar microlens array~~ formed over ~~said~~ the plurality of photosensitive regions; ~~said~~ the microlens array comprising;

a first light conductor having a plurality of concave recesses, and

a second light conductor within each recess and over substantially planar surfaces formed between ~~said~~ the concave recesses of ~~said~~ the first light conductor[[.]];

wherein a topmost portion of a topmost light conducting structure in the imager device is substantially planar.

Claims 22-26. (Canceled)

27. (Currently Amended) An integrated circuit comprising:

an imager device, comprising:

a substrate having a plurality of photosensitive regions; a microlens array formed over ~~said~~ the plurality of photosensitive regions; ~~said~~ the microlens array ~~providing for a substantially planar imager device~~ comprising;

a first light conductor having a plurality of concave recesses, and

a second light conductor within each recess and over ~~said~~ the first light conductor, ~~said~~ the second light conductor being coextensive with an adjacent second light conductor in at least a first plane and having a substantially planar surface, wherein a topmost portion of a topmost light conducting structure in the imager device is substantially planar; and

readout circuitry coupled to ~~said~~ the plurality of photosensitive regions.

Claims 28-46. (Canceled)

47. (Currently amended) The light detecting system of claim 21, wherein ~~said~~ the first light conductor has a first index of refraction and ~~said~~ the second light conductor has a second index of refraction that is different from ~~said~~ the first index of refraction.

48. (Currently amended) The light detecting system of claim 47, wherein ~~said~~ the first index of refraction is less than ~~said~~ the second index of refraction.

49. (Currently amended) The light detecting system of claim 21, wherein at least one of ~~said~~ the first and second light conductors is formed of material selected from the group consisting of glass, an optical thermoplastic material, a polyimide, a thermoset resin, a photosensitive gelatin, and a radiation curable resin.

50. (Currently amended) The light detecting system of claim 21, further comprising a color filter formed over ~~said~~ the second light conductor.

51. (Currently amended) The light detecting system of claim 21, further comprising a color filter formed below ~~said~~ the first light conductor.

52. (Currently amended) A system, comprising:

an imager device, comprising:

a substrate having a plurality of photosensitive regions; and

a microlens array formed over the plurality of photosensitive regions, the microlens array comprising:

a first light conductor having a plurality of concave recesses, and

a second light conductor within each recess and over substantially planar surfaces formed between the concave recesses of the light conductor.

~~The light detecting system of claim 21, wherein a portion of said second light conductor over said planar surface of said first light conductor has a thickness approximately equal to $\lambda/2 * N$, wherein λ refers to a particular wavelength of light entering ~~said the~~ the microlens, and N refers to an index of refraction associated with ~~said the~~ the second light conductor.~~

53. (Currently amended) The integrated circuit of claim 27, wherein ~~said the~~ the first light conductor has a first index of refraction and ~~said the~~ the second light conductor has a second index of refraction that is different from ~~said the~~ the first index of refraction.

54. (Currently amended) The integrated circuit of claim 53, wherein ~~said the~~ the first index of refraction is less than ~~said the~~ the second index of refraction.

55. (Currently amended) The integrated circuit of claim 27, wherein at least one of ~~said the~~ the first and second light conductors is formed of material selected from the group consisting of glass, an optical thermoplastic material, a polyimide, a thermoset resin, a photosensitive gelatin, and a radiation curable resin.

56. (New) The system of claim 52, wherein the first light conductor has a first index of refraction and the second light conductor has a second index of refraction that is different from the first index of refraction.

57. (New) The system of claim 52, wherein the first index of refraction is less than the second index of refraction.

58. (New) The system of claim 52, wherein at least one of the first and second light conductors is formed of material selected from the group consisting of glass, an optical thermoplastic material, a polyimide, a thermoset resin, a photosensitive gelatin, and a radiation curable resin.